

**Amendments to the Abstract:**

Please replace the abstract with the following substitute abstract:

--A computer implemented process for producing a representation of a reference spectrum for a reference solution having a first pH condition, for use in determining the composition of a test sample, is disclosed. The process involves producing a position value for at least one peak of the reference spectrum in response to a measured pH condition of the test sample, and a property of at least one peak in a base reference spectrum for the reference solution, the base reference spectrum being associated with a pH condition of the reference solution that is different from said measured pH condition.--